

C4C-EX04530A10000

deTec

**SAFETY LIGHT CURTAINS** 





### Ordering information

#### deTec4 Core Ex II 3GD

Resolution	Scanning range	Protective field height	System part	Туре	Part no.
30 mm	15 m	450 mm	Receiver	C4C- EX04530A10000	1220353

Other models and accessories → www.sick.com/deTec

Illustration may differ











#### Detailed technical data

#### Features

Application	Explosive areas
Ex-approvals	ATEX for gas: II 3G Ex ec op is IIC T4 Gc ATEX for dust: II 3D Ex tc IIIC T135°C Dc
System part	Receiver
Compatible sender	1220340
Resolution	30 mm
Scanning range	15 m
Protective field height	450 mm
Response time	10 ms
No blind zones	Yes
Synchronization	Optical synchronisation
Items supplied	Receiver Test rod with diameter corresponding to the resolution of the safety light curtain "Notes for explosion protection" label(s) Safety instruction Mounting instructions Operating instructions for download

#### Safety-related parameters

Туре	Type 4 (IEC 61496-1)
Safety integrity level	SIL3 (IEC 61508) SILCL3 (IEC 62061)
Category	Category 4 (ISO 13849-1)
Performance level	PL e (ISO 13849-1)
$\ensuremath{PFH_D}$ (mean probability of a dangerous failure per hour)	$3.7 \times 10^{-9}$
T <sub>M</sub> (mission time)	20 years (ISO 13849-1)
Safe state in the event of a fault	At least one OSSD is in the OFF state.

#### **Functions**

Protective operation	✓
Automatic calibration of the protective field width	✓

#### Interfaces

System connection	Male connector M12, 5-pin
Display elements	LEDs
Fieldbus, industrial network	
Integration via Flexi Soft safety controller	CANopen <sup>1)</sup> DeviceNet™ EtherCAT® EtherNet/IP™ Modbus TCP PROFIBUS DP PROFINET

 $<sup>^{1)}</sup>$  For additional information on Flexi Soft -> www.sick.com/Flexi\_Soft.

#### Electrical data

Protection class	III (IEC 61140)
Supply voltage V <sub>S</sub>	24 V DC (19.2 V 28.8 V)
Ripple	≤ 10 %
Power consumption typical	1.73 W (DC)
Output signal switching devices (OSSDs)	
Type of output	2 PNP semiconductors, short-circuit protected, cross-circuit monitored <sup>1)</sup>
ON state, switching voltage HIGH	24 V DC (V <sub>S</sub> - 2.25 V DC V <sub>S</sub> )
OFF state, switching voltage LOW	≤ 2 V DC
Current-carrying capacity per OSSD	≤ 300 mA

 $<sup>^{1)}</sup>$  Applies to the voltage range between  $-30~\mathrm{V}$  and  $+30~\mathrm{V}$ .

#### Mechanical data

Dimensions	See dimensional drawing
Housing material	Aluminum extruded profile
Bending radius	
Stationary position	> 12 x cable diameter
Flexible use	> 15 x cable diameter

#### Ambient data

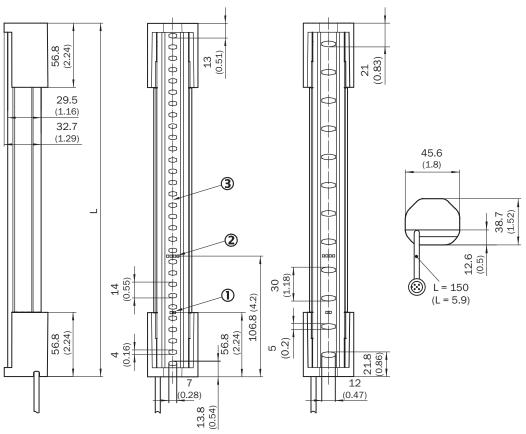
Enclosure rating	IP65 (IEC 60529) IP67 (IEC 60529)
Ambient operating temperature	0 °C +55 °C
Storage temperature	-30 °C +70 °C
Air humidity	15 % 95 %, Non-condensing
Vibration resistance	5 g, 10 Hz 55 Hz (IEC 60068-2-6)
Shock resistance	10 g, 16 ms (IEC 60068-2-27)

#### Classifications

ECI@ss 5.0	27272704
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ECI@ss 5.1.4	27272704
ECI@ss 6.0	27272704
ECI@ss 6.2	27272704
ECI@ss 7.0	27272704
ECI@ss 8.0	27272704
ECI@ss 8.1	27272704
ECI@ss 9.0	27272704
ECI@ss 10.0	27272704
ECI@ss 11.0	27272704
ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	EC002549
UNSPSC 16.0901	46171620

#### Dimensional drawing (Dimensions in mm (inch))



- ① Operating indicator
- ② Alignment indicator
- ③ Optical axis

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	L
300	313
450	463

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600	613
750	763
900	913
1,050	1,063
1,200	1,213
1,350	1,362
1,500	1,512
1,650	1,662
1,800	1,812
1,950	1,962
2,100	2,112

#### Recommended accessories

Other models and accessories → www.sick.com/deTec

	Brief description	Туре	Part no.	
Terminal and alignment brackets				
(Park)	4 pieces, FlexFix bracket for 2 devices (e.g. sender and receiver), can be aligned $\pm15^\circ$ , including M5 screw, plastic	BEF-1SHABPKU4	2066614	
A STATE OF THE STA	4 pieces, QuickFix bracket for 2 devices (e.g. sender and receiver), plastic	BEF-3SHABPKU4	2098710	
Test and monitoring tools				
	30 mm diameter	Test rod 30 mm	2022602	
Distributors				
	Head A: female connector, M12, 5-pin, A-coded Head B: male connector, M12, 5-pin, A-coded 5-pin	DSC-1205T000025KM0	6030664	
Plug connectors and cables				
No.	Head A: female connector, M12, 5-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m	YF2A15-020UB5XLEAX	2095617	
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 5 m	YF2A15-050UB5XLEAX	2095618	
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 10 m	YF2A15-100UB5XLEAX	2095619	
10	Head A: female connector, M12, 5-pin, straight, A-coded Head B: male connector, M12, 5-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m	YF2A15-020UB5M2A15	2096009	

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Brief description	Туре	Part no.
Head A: female connector, M12, 5-pin, straight, A-coded Head B: male connector, M12, 5-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 5 m	YF2A15-050UB5M2A15	2096010
Head A: female connector, M12, 5-pin, straight, A-coded Head B: male connector, M12, 5-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 10 m	YF2A15-100UB5M2A15	2096011

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

# **WORLDWIDE PRESENCE:**

Contacts and other locations -www.sick.com

